NASA RANGE SAFETY PROGRAM
2005 ANNUAL REPORT

Highlights of 2005

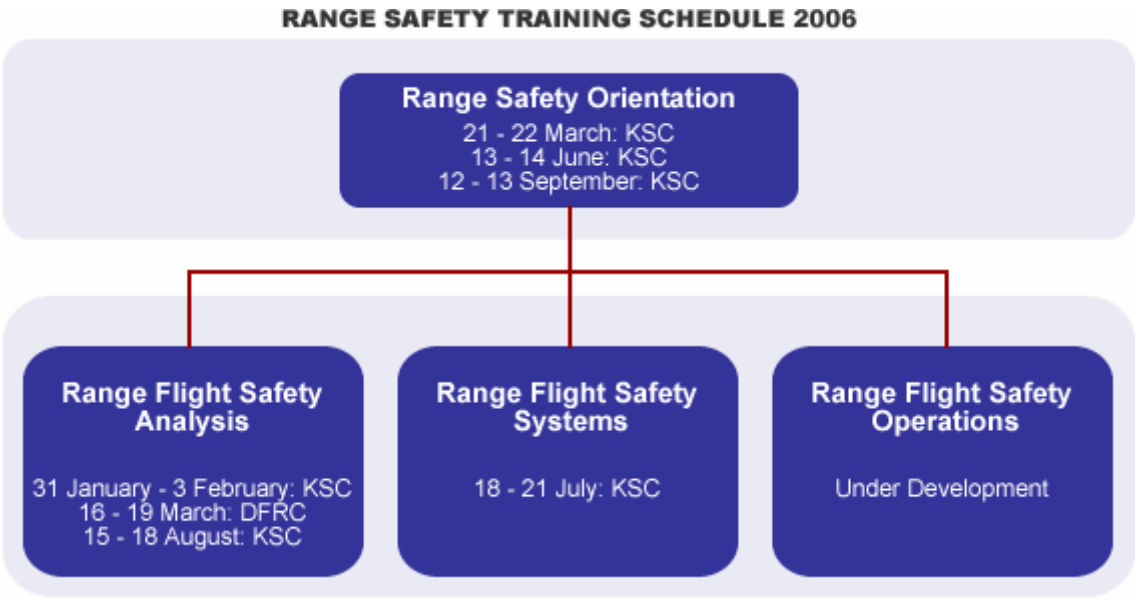
Range Safety Training 2005

The Range Safety training program maintained a rapid pace during 2005. The first Range Flight Safety Analysis course took place at Kennedy Space Center (KSC), and the Range Safety Orientation course was offered three times with 66 students in attendance.

RANGE SAFETY TRAINING 2005

COURSE	CUSTOMER	LOCATION	DATES	STUDENTS
Analysis	NSTC	KSC	15 - 18 Feb.	12
Orientation	NSTC	KSC	22 - 23 Mar.	14
Orientation	NSTC	KSC	14 - 15 Jun.	28
Orientation	NSTC	KSC	13 - 14 Sep.	24

Course development also remained in high gear as the Range Flight Safety Systems course will be offered for the first time in 2006. The Range Flight Safety Operations course began to take shape as well, with full development anticipated in 2006. All of the courses continue to have a long waiting list, and centers and programs continue to request dedicated classes. The 2006 schedule of classes is shown in the graphic below. Note that Dryden Flight Research Center (DFRC) will host one of the courses in 2006. For information concerning enrollment in the courses, visit http://www6.jsc.nasa.gov/safety/Training.



Range Safety Orientation

Range Safety Orientation remains a very popular course and a much sought after source of training for senior, program, and project managers who need to have an understanding of top-level range safety requirements. This course is designed to provide an overview of the Range Safety mission, associated policies, and requirements, as well as NASA roles and responsibilities. Students visit range safety facilities at Cape Canaveral Air Force Station and KSC. While the course is normally given only at KSC, it will be conducted once at DFRC in 2006.

Range Flight Safety Analysis

The restructured Range Flight Safety Analysis course, the first of three Phase II advanced courses, was offered for the first time in February of 2005. The course is managed by the NASA Safety Training Center (NSTC) and taught by KSC Range Safety personnel.

One of the primary roles of the Range Safety staff is to perform flight analyses to identify and mitigate public risk associated with range operations. This course provides a detailed understanding of the process of range safety analysis. It includes the following topics:

- NASA, Federal Aviation Administration, and Department of Defense requirements for flight safety analysis
- Range operations hazards, risk criteria, and risk management processes
- In-depth coverage of the containment and risk management analyses performed for Expendable Launch Vehicles (ELVs) at the Eastern Range.

Although the course is based on ELVs at the Eastern Range, the overall analysis process and concepts are applicable to other vehicles and other ranges as well. While the course concentrates on debris hazards and analyses, it includes an overview of toxic, blast, and radiation analyses. A class exercise covers the entire analysis process. The prerequisite for attending this course is NSTC 074-Range Safety Orientation or equivalent experience (an engineering degree and a background in range safety).

The target audience for this course is listed below.

- NASA, Federal Aviation Administration, and Department of Defense Range Safety Analysts
- Range Safety personnel in other disciplines
- Program and project managers and engineers who design potentially hazardous systems to operate on a range
- Personnel who conduct hazardous operations on a range
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As noted above, this course will be offered twice at KSC and once at DFRC.